177 Housing and village improvement: The changes in this aspect of culture
are capable of fairly precise description, which has been provided in
Table 10.A This table applies to Sivepe only; I shall refer to some
minor differences between Sivepe and Inonda at the end of this section.
335 The changes may be analysed into several main types. First, there is
412 the extent to which European materials and tools are used. Here, we note
177 that nails were a building material as early as 1951 (and therefore
also hammers), but a significant change has been the extent of their
use. The introduction of nails was partly a time-saving device, as
framing can be efficiently lashed together with the bark fibres
traditionally used. On the other hand, the "timber" walls might not
be easy to lash together and nails are probably necessary here. On
the other hand, the blackpalm or betelnut which is used for the floors
does not take nails at all well and the lashing is a superior technique,
177 used in almost all the houses. Secondly, there have been changes in
342 house design, and the use of materials. The increase in house size,
which was the most striking of the innovations, was general throughout
the village, according to a standard set by the leader and adhered to
by everybody. The change from betelnut to blackpalm flooring is
towards a superior, toughter material, harder to work and comparatively
rare in the Sasembata district. The change from sago to "timber"
walls was purely a matter of aesthetic fashion. I was told by Mr.
Sebire that it started in the early 1950's in the Kokoda district; in
Sasembata district it does not seem to have started until around 1965.
The new houses at the mission station had "timber" walls; so had the
new houses in several other nearby villages. Sivepe, being built on
a new site after the fashion started was wholly built in "timber"
(except for a few houses shifted from the old site and standing on the
new one and gradually replaced). The "timber" looks like weatherboard,
[335] which has been used on Australian houses in the Kokoda district. It
is cut from logs sawed to a length of six feet, which are then split
into shingles with a bushknife, a procedure which takes much time and
skill. The six feet long shingles are generally 3/8 inch thick and
five inches wide. The intention is to overlap them, providing better
protection against wind and rain than the sago walls have. The work of
cutting the shingles is so arduous, however, that the overlap is usually
quite small when the houses are built; as the logs are split green, the
timber shrinks until cracks appear between the boards.

177 The third type of change is that actually advocated by European
[342] authorities. (The timber walls, according to administration officers,
were a purely Orokaiva idea.) For reasons of hygiene, the administration
wanted the houses to have windows, which traditionally they did not
have. The new houses have large windows, but they are all blocked up
with boards (to keep the wind and rain out) so that they are not functional,
[364] except in warding off criticism from Australian officials. The village
improvement measures: elimination of pigs, lavatories, rubbish holes,
[351] pens for chickens; are all based on European advocacy. The neat lines
of crotons and other shrubs, which are beginning to form a standard

A [See Cat. 116, p. 215--Analyst]

177 part of village layouts, are a blend of Papuan tradition (the Orokaiva
[351] have always been very fond of flowers and planted ornamental shrubs)
[363] and a new Australian-derived passion for military regularity. This is evident especially in the emphasis placed on building the houses in a line, and equidistant; the shrubs are also rigidly in line.

177 The changes are to some extent due to the experience of Ilimo
342 camp which is reflected in the style of Old Sivepe. The changes found in New Sivepe are due to subsequent influences, mainly that of the Local Government Council. Once village improvement became an ideologically validated objective, the way was open to the adoption of further innovations borrowed from the Kokoda district, such as the use of "timber." I did not see "timber" used East of the Sasembata district.

[192] It may well be that the increase in house size, coupled with the present need to build a large number of houses in the same year to form a major modern village, would rapidly have led to a critical shortage of sago in Sivepe if people had continued to use this material for walls. Thus, the present practice of using timber instead of sago could well have an economic explanation. Sago roofs can be built without destroying the plants, whereas plants have to be cut entirely to produce sago walls. I was not, however, given an economic explanation for the change-over to timber; I was told only that it was better-looking and provided good protection against wind and rain. But nobody would say anything against sago; sago walls are "also very good."

177 Tools and skills: Traditional agriculture has undergone considerable
241 change, as elsewhere in New Guinea, by the introduction of steel axes, bush knives, grubbers etc. Thus the preparation of the soil for
[412] gardening has been greatly facilitated. There has, however, been no change in the operations concerned with the plants themselves, planting and harvesting being done with wooden digging sticks. Many of the men have had experience in rubber plantations, with operations such as tapping; there are a few tapping chisels in the village. Training in coffee cultivation occurred after the eruption, but it was not until a few years ago that hulling machines were introduced. Every grower
177 at Sivepe has, as far as I know, only one coffee sack. The basic
245 skills needed to bring rubber and coffee to market have been mastered,
249 but up-to-date techniques for improving the yield of the trees have not been mastered. The difficulty, in this respect, is not purely one of communication, as men who have been employed as rubber tappers must be familiar with certain rules regarding care of the trees which are definitely not being practised. Similarly, I doubt whether one can explain failure, on the part of Sivepe growers, to prune their coffee trees by ignorance of pruning techniques. The true explanation would appear to be a lack of confidence that the rules make any difference to the yields. In Hohorita people began to prune their coffee trees when they discovered they were then easier to harvest. But the whole pattern of reasoning upon which Western horticultural practises are

TABLE 10

CHANGES IN HOUSE DESIGN,
HOUSE CONSTRUCTION AND
DOMESTIC AMENITIES IN SIVEPE, 1936-1966
(Comparison between standards reportedly applied
on four successive village sites)

Elements	1. Pusahambo (pre-war)	2. Pamba (between war and eruption)	3. Old Sivepe (after eruption, until 1965)	4. New Sivepe (1966)
Floor level	Raised on posts	Raised on posts	Raised on posts	Raised on posts
Flooring material	Betelnut, wide gaps	Betelnut: no gaps	Some betelnut, some blackpalm	Some betelnut, some blackpalm
Windows	No windows	No windows	Small windows	Large windows
No. of rooms	Three	Three	Three	Three
Walling material	Split sago	Split sago	Split sago	"Timber"
Nails: framing	Nil	Younger people	General	General
Nails: walls	Nil	Nil	Nil	General
Shrubs	Beside houses	Beside houses	Beside houses	To mark paths
Betelnut	Planted	Planted	Planted	Planted
Coconut	Few	More	More	More
Waste disposal	In gully	In gully	In gully	Rubbish holes
Pigs	Present	Present	Present	Absent
Hen houses	Absent	Absent	Absent	Pens built
Lavatories	Absent	Absent	A few	General
Floor area	"Very small"	"Bigger"	"Much bigger again" (200 sq. ft.)	"Big" (375 sq. ft.)

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22: Schwimmer E-4,5 (1966-1967) 1969 QU23 Orokaiva QU23
Mount Lamington